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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,091	12/05/2001	Frederic Nigon	TRW(F)5992	8576

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TAROLLI, SUNDHEIM, COVELL & TUMMINO L.L.P.
526 SUPERIOR AVENUE, SUITE 1111
CLEVEVLAND, OH 44114

EXAMINER

JENKINS, JERMAINE L

ART UNIT PAPER NUMBER

2855

DATE MAILED: 01/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/005,091	NIGON ET AL.	
	Examiner	Art Unit	
	Jermaine Jenkins	2855	NW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-24, 26 and 35-48 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 13-24, 26 and 35-48 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 13-15, 17-21, 26, 41, 43-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mock et al (6,062,072) in view of Fiorletta (5,289,160).

In regards to claims 13, 26, 41 & 43-46, Mock et al teaches an air pressure monitoring device comprising detectors (S 1-S4) having a piezoelectric-type pressure sensor for each associated tire (R1-R4) (Column 4, lines 59-64), respective receivers (E1-E4) conveying associated signals to a central processing unit (Z) with each receiver having an antenna (Column 5, line 18-21), a coil of the receiving antenna being wound around the tire (Column 6, line 1, See Figures 2-4), and an antenna being insulated within the tire by using electrically insulated wire (Column 5, lines 40-41). However, Mock et al does not specifically teach a fixed antenna arranged near a tire.

Fiorletta teaches the mounting of a second antenna (603) within a housing placed near the associated wheel (Column 8, lines 57-61, See Figure 6). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide another fixed antenna to the receiver/transmitter as shown by Fiorletta in the apparatus of Mock et al for the purpose of maintaining an accurate determination of the generated signals from any type sensor apparatus to a processing unit.

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With respect to claims 14, 15, 17-21, 47 & 48, Mock et al teaches the integration of the antenna (21) within the tire (20) with the antenna (21) being wound around the axis of the tire (20) (Column 5, lines 36-41; Column 11, lines 8-15, See Figures 2-4).

3. Claims 23, 24 & 35-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mock et al (6,062,072) and Fiorletta (5,289,160) in view of Yonemoto et al (4,558,312).

With respect to claims 23, 24 & 35-40, in combination Mock et al and Fiorletta teaches the claimed invention except for the wheel rim being made of one of a non-conductive material and a weakly conductive material.

Yonemoto et al teaches the wheel rim being made of one of a non-conductive material (Column 7, lines 46-58). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a wheel rim that is non-conductive or semi-conductive for the sole purpose of isolating any electrical interference from the antenna.

With respect to claim 36, Mock et al teaches the integration of the antenna (21) within the tire (20) with the antenna (21) being wound around the axis of the tire (20) (Column 5, lines 36-41; Column 11, lines 8-15, See Figures 2-4).

4. Claims 16, 22 & 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mock et al (6,062,072) in view of Fiorletta (5,289,160) as applied to claims 13-15, 17-21, 26, 41, 43-48 above, and further in view of Karbo et al (4, 160,234).

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With respect to claims 16, 22 & 42, Mock et al and Fiorletta teaches the claimed invention except for the parameter sensor and the detector antenna of the detector being fixed on an annular support for running flat carried by the wheel rim, and the detector having a tuning circuit having an inductor and a capacitor, a rectifier and a circuit with at least one power storage capacitor, as well as a status device which receives output signals of the parameter sensor and supplies a modulating signal to an impedance modulation circuit of the detector antenna.

Karbo et al teaches a tire conditioning system comprising an annular supported run-flat insert (26) having a transducer (50) and a circuitry (46) that has a rectifier (52), a charge storage release circuit (54), a modulator (56), a transmitter (58) with an antenna (28) (Column 3, lines 48-66, Column 4, lines 8-10 & 66-68, See Figures 2-4). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a run-flat system for the purpose of displaying tire measurement values to the operator of the vehicle while the wheel is riding in low pressure without being completely flat.

Response to Arguments

5. Applicant's arguments with respect to claims 13-26 & 35-48 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermaine Jenkins whose telephone number is 703-305-3839. The examiner can normally be reached on Monday-Friday 8am-430pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 703-305-4816. The fax phone number for the organization where this application or proceeding is assigned is 703-306-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-3431.

Jermaine Jenkins
A.U. 2855



EDWARD LEFKOWITZ
SUPERVISOR